Problem Set 6
Due Wed, Oct 25

Background: Chapters 5 & 6 (Finite Depth Box)
Problems: P5.6 (this is a whopper!), P5.7, P6.1, P6.3, P6.5, P6.8, P6.10, P6.17 (another whopper!), P6.18, P6.20

Notes:
1. P5.6 is lengthy, and material from chapter 5 is a suitable target for the midterm (see below). It would probably make sense to do P5.6 and P5.7 right away.

2. No Mathematica problem. I don’t know if I will be assigning any more of these, but I assume that you have reached a point at which you are comfortable performing an array of low-level tasks, as well as these high-level tasks (differentiating, integrating, and function plotting) and can decide for yourself when Mathematica is helpful. At this point, I plan to base part of the midterm on Mathematica, but this remains to be seen.

3. **Midterm exam alert.** This is assignment is due after Fall Break,¹ but we will not wait until then to have the midterm.

   At this point, I plan to conduct the midterm in two stages, one in-class (1 hour) and one take-home (multiple hours). Both stages will cover material in Chapters 1-5 and relevant uses of Mathematica (see above).

   The in-class midterm will be Mon, Oct 9, 9 am.
   The take-home midterm will be due in my box (or Inbox) Sat, Oct 13, noon.

4. **Future midterm exam alerts.** The next midterm will cover material in Chapters 6-8. I will have lectured on all of Ch. 6 and much of Ch. 7 before Fall Break, so you can expect a second midterm exam to fall 10-14 days after Fall Break. Take a look at the lecture schedule posted on the web for my ideas…

¹ You may work on this assignment during Fall Break if you choose, but this is not my intent. I have left you an ample number of “academic days” to work on the assignment.